



UNITED STATES PATENT AND TRADEMARK OFFICE

ST
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/646,119	10/30/2000	Gunter Halmschlager	P19790	3782

7055 7590 10/30/2002

GREENBLUM & BERNSTEIN, P.L.C.
1941 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

FORTUNA, JOSE A

ART UNIT	PAPER NUMBER
----------	--------------

1731

17

DATE MAILED: 10/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/646,119

Applicant(s)
Halmschlager et al.

Examiner
José A. Fortuna

Art Unit
1731



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 29, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-97 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-52, 62-80, and 89-97 is/are rejected.
- 7) ☒ Claim(s) 53-61 and 81-88 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 1731

DETAILED ACTION

1. The finality of the prior action has been withdrawn in view of new grounds of rejection.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 46, 47, 74, 75 and 76 are rejected under 35 U.S.C. 102(b) as being anticipated by Turner et al., US Patent No. 4,830,709

Regarding Claims 46-47 and 74-76, Turner et al teach a device and method of making a multi-ply paper in which the different plies are made in separated headboxes, couched, and joined by the side having the more fines, see figures. Note that it is well known and applicants admits it in the specification, that the side of the web having the most fines is the side where there is less dewatering, i.e., the air side of Fourdrinier, etc. Turner et al. teach the making of cardboard and teach the advantage of joining the plies using the surface having more fines in the surface, see column 2, lines 12-18. Also Turner et al. teach the use of a Multilayer headbox along with other types of headboxes in the multi-ply board, see figure 3 and column 6, lines 39-52 and teach in the same paragraph the formation of thin layer, i.e., a paper layer, and other layer being a board, paperboard, (for claims 46 and 76). Regarding claim 74, Turner et al shows in the figures the use of pressure elements in the outside of the felts/fabrics, see elements 22, 22a etc.

Art Unit: 1731

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Column.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1731

6. Claims 48-52, 62-73, ~~74~~ 74-80 and 89-97 rejected under 35 U.S.C. 103(a) as being unpatentable over Turner et al.

Turner et al are silent with respect to the specific of these claims, i.e., the circulating of a dewatering belt over a former element, claims 48/77¹; including a headbox, claim 49; forming element being a roll, claims 50/78; two gap formers; claims 51/79; web traveling in different direction, claims 52/80. Regarding Claims 48/77-50/78, these claims define what is well known in the art, as a "Crescent Former," defined in US patent No., 3,337,435 a more recently used in US Patent Nos. 5,607,551, 5,238,534, GB 2 283 766, DE 19704443 A1, etc. Note that the crescent former is a gap former, twin wire, having a forming element, a roll, in which a moving felt and a fabric wrap the roll, the felt run next to the roll and the fabric runs on the outside forcing the stock to drain through the fabric. Crescent formers are functionally equivalent to twin wires/gap formers and its use would have been obvious to one of ordinary skill in the art since he/she would have reasonable expectation of success if a crescent former is used instead of a functional equivalent twin wire. Note also that it has been held that "[W]here two equivalents are interchangeable for their desired function, substitution would have been obvious and thus, express suggestion of desirability of the substitution of one for the other is unnecessary." *In re Fout* 675 F. 2d 297, 213 USPQ 532 (CCPA 1982); *In re Siebentritt*, 372 F.2d 566, 152 USPQ 618 (CCPA 1967).

¹ A forward slash "/" has been used to separate a claim and its equivalent in the apparatus area, i.e., 48/77 indicates claims 48 and 77, claim 77 being the equivalent in the device claims.

Art Unit: 1731

Regarding Claims 51/79 and 52/80, 71/96, Turner et al teach the use of two gap formers and shows in all the figures the formed web traveling in opposite directions before entering the couching zone. Claims 62/89-70/96, teach the use of several headboxes, including Fourdrinier formers and the different ways in which the layers having more fines can be joined. Turner et al teach the combination of gap formers and Fourdriniers, see previous actions and also teach that more than two plies can be made. Therefore, using more than one Fourdrinier or combinations of Fourdrinier and gap formers and the different manners in which the formers can/need to be placed in order to join the surfaces with more fines is with the levels of ordinary skill in the art in view of Turner et al teaching. Note that Turner et al teach the moving wire moving horizontally in the couching zone of claims 65 and 69, see figures. As to claim 72 and 72, Turner et al. teach only the use of single layer headbox; however the use of a multilayered headbox is within the levels of ordinary skill in the art since its use, i.e. the use of a multilayered headboxes, is conventional in the art, see cited references.

Allowable Subject Matter

7. Claims 53/81-61/88 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach nor fairly suggest the guiding of a web/layer, sandwiched between two

Art Unit: 1731

dewatering belt, around a deflection roll and then couched with the other web/layer, as claimed in claims 53/81.

Response to Arguments

9. Applicant's arguments with respect to claims 46-97 have been considered but are moot in view of the new ground(s) of rejection.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to José Fortuna, whose telephone number is (703)305-7498. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin, can be reached on (703)308-1164. The fax number for this group is (703)305-7115.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-0661.

When filing a FAX in group 1730, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

José A. Fortuna
October 28, 2002


JOSE FORTUNA
PRIMARY EXAMINER
ART UNIT 1731